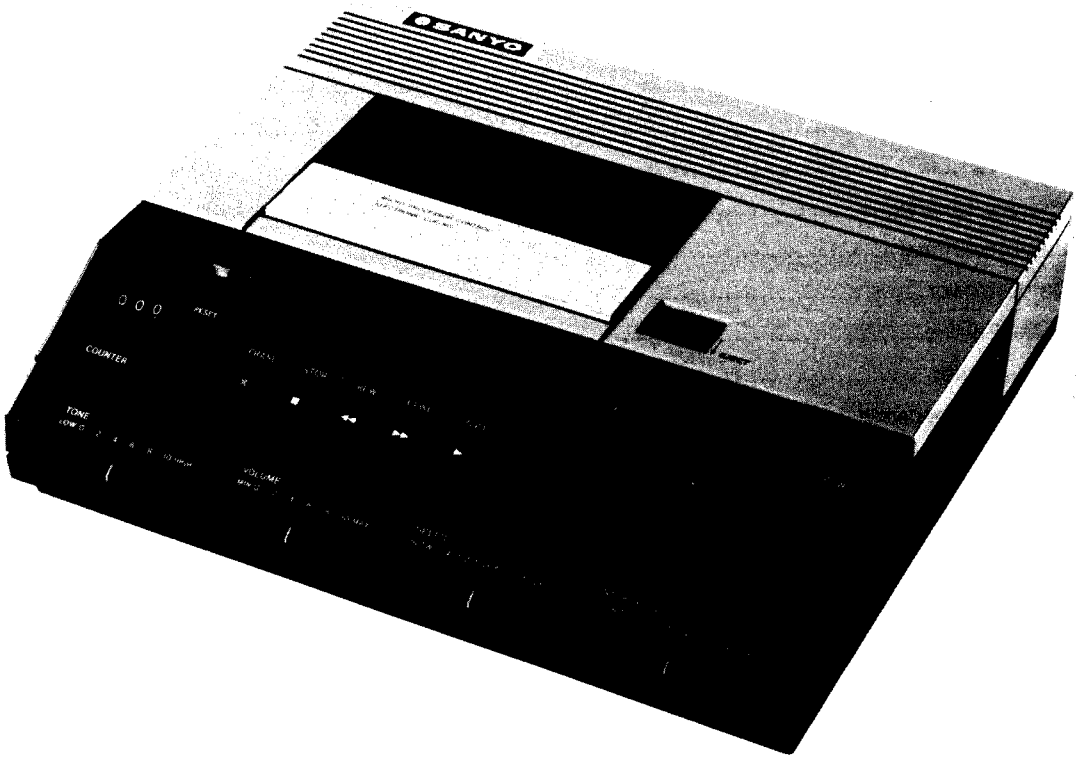
SERVICE MANUAL

SANYO

MEMO-SCRIBER

TRC9010

WEST GERMANY



142 395 14

WM-13150

SPECIFICATIONS

Recording System	AC Bias, 1/2 Track
Erasing System	DC Erasing
Quick Erase Ratio	Better than 40dB
Tape Speed	1-7/8ips. (4.75cm/sec.)
Tape Speed Control	
Slow	−13 ~ −27%
Fast	+13 ~ +27%
Rewind Time	120sec. (C-60 cassette)
Fast Forward Time	120sec. (C-60 cassette)
Wow & Flutter	0.4% RMS
Frequency Response	205 ~ 6,300Hz
Signal to Noise Ratio	Better than 40dB
Backspace Time	
Backspace Control Position	
0	0sec.
5	1 ~ 3sec. of playback
10	3 ~ 6sec. of playback
Warning Tone Signal	620Hz
Cue Tone Signal	15Hz
Output Power	500mW, 10% THD
Power Source	AC: 220V, 50/60Hz
Loudspeaker	57mm dia., 16Ω
Terminal Impedance	
Earphone	100Ω
Semiconductors	
IC	6
Transistor	36
Diode	17
LED (Light Emitting Diode)	6
Dimensions	262(W) x 241(D) x 70(H)
Weight	2.5kg (Main Unit)

–Specifiecations subject to change without notice.–

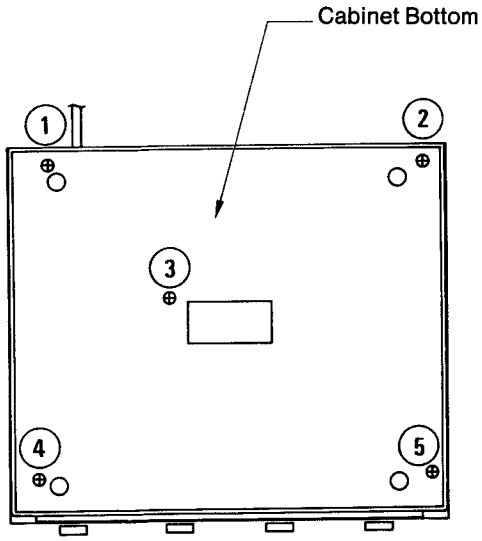
DISASSEMBLY INSTRUCTIONS

GENERAL REMARKS

- Before disassembling the unit, spread a soft rubber mat or a cloth on the work bench to avoid scratches and grease stains.
- Do not use a material which is likely to cause static electricity because transistors and ICs may be easily damaged by it.
- Reassemble the unit, noting the kind of screws, the soldering and arrangement of the leads.
  Refer to "Circuit Diagram" and "Exploded Views" for correct assembly.
- Before disassembling the unit, take out the cassette tape from the cassete compartment.
- Carefully handle the Belt because grease easily attaches to it.
  Then, check the used rubber parts. If the rubber has deteriorated or is scratched, replace the part with a new one.

CABINET BOTTOM REMOVAL

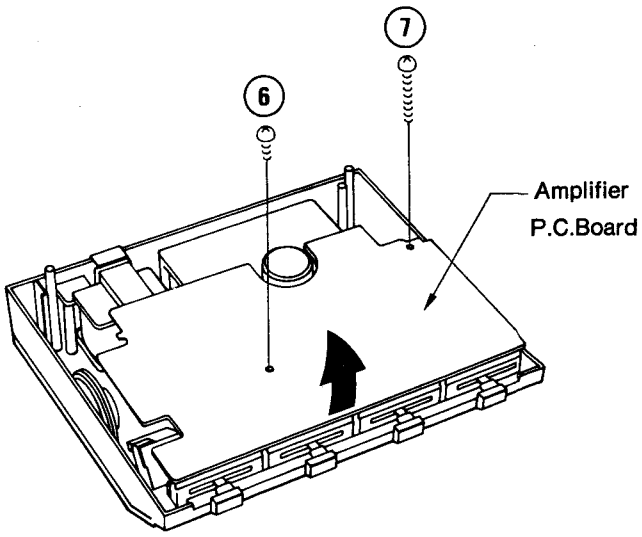
1. Place the unit upside down and remove the five screws (1 ~ 5) fastening the Cabinet Bottom.



2. Detach the Cabinet Bottom by lifting it.
3. Reassemble in reverse order.

AMPLIFIER P.C.BOARD REMOVAL

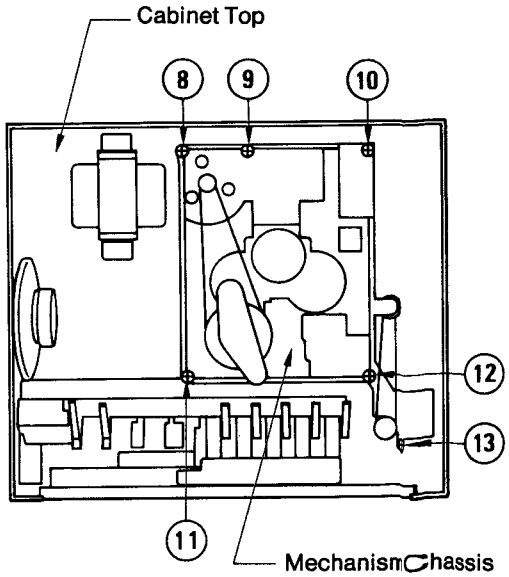
1. Follow the instructions for the "Cabinet Bottom Removal".
2. Remove the two screws (6 and 7) fastening the Amplifier P.C.Board.



3. Turn over the P.C.Board toward the back of the unit with caution not to damage the lead wires.
4. Reassemble in reverse order.

MECHANISM CHASSIS REMOVAL

1. Follow the instructions for "Cabinet Bottom Removal" and "Amplifier P.C.Board Removal".
2. Remove the six screws (8 ~ 13) fastening the Mechanism Chassis.



3. Detach the Mechanism Chassis with caution not to damage the lead wires.
4. Reassemble in reverse order.

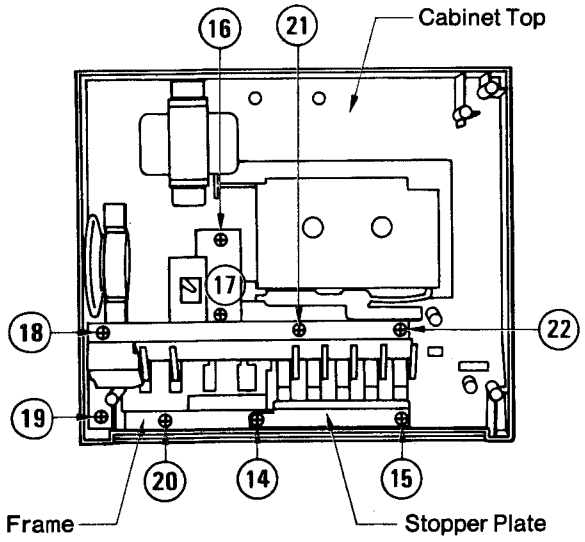
DISASSEMBLY INSTRUCTIONS (Continued)

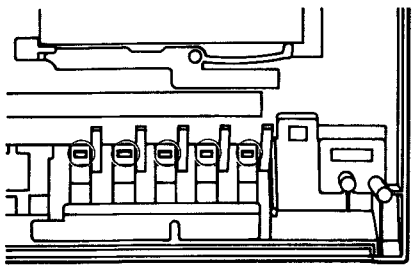
FRAME REMOVAL

1. Remove the Mechanism Chassis by following the instructions for it.

2. Remove the two screws (14 and 15) and detach the Stopper Plate.

3. Remove the seven screws (16 ~ 22) fastening the Frame and carefully detach the Frame from the Cabinet Top. Then, remove the seven Buttons and the Front Cover.

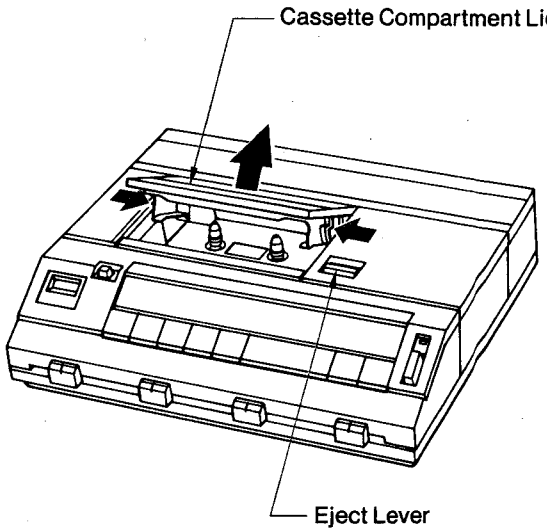




4. Reassemble in reverse order.

CASSETTE COMPARTMENT LID REMOVAL

1. Open the Cassette Compartment Lid by pulling the Eject Lever.



2. Unlock the compartment latches from the Cabinet Top by pushing both sides of the compartment lid strongly. Now, the Lid can be easily removed from the unit.

3. Reassemble in reverse order.

ADJUSTMENTS

GENERAL REMARKS

- Before adjusting the unit, wipe the tape contacting surfaces as well as the rubber surfaces of the driving parts with a soft cloth soaked in alcohol. Trouble may occur because of oil and grease stains.

- Carefully handle the belt because grease easily attaches to it.
  Then, check the used rubber parts. If the rubber has deteriorated or is scratched, replace the part with a new one.

REQUIRED EQUIPMENT

- Cassette-type Torque Meter
- VTVM
- Frequency Counter
- Dummy Load (16Ω)
- Test Tapes
  - * 3kHz Test Tape (Example: TEAC MTT-111) for Tape Speed Adjustment
  - * 6.3kHz Test Tape (Example: TEAC MTT-113) for Head Azimuth Adjustment
- Alignment Tool

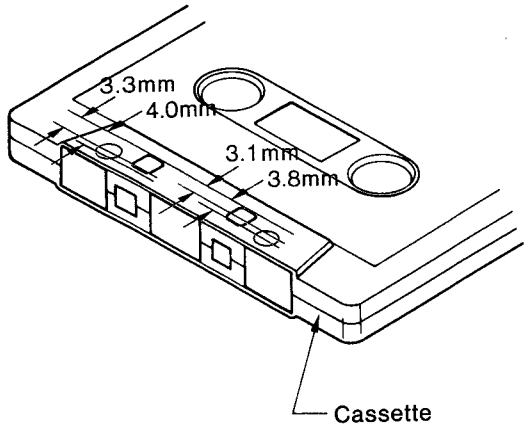
Before the adjusment, set the Switches and Controls as follows:

* Power Switch ..... ON
* Search Switch ..... OFF
* Speaker Switch ..... Speaker
* Tone Control ..... 10 (Maximum)
* Volume Control ..... 5 (Center)
* Speed Control ..... 0 (click position)

HEAD POSITION ADJUSTMENT

The following adjustment should be performed whenever the Head and Solenoid are disassembled or replaced.

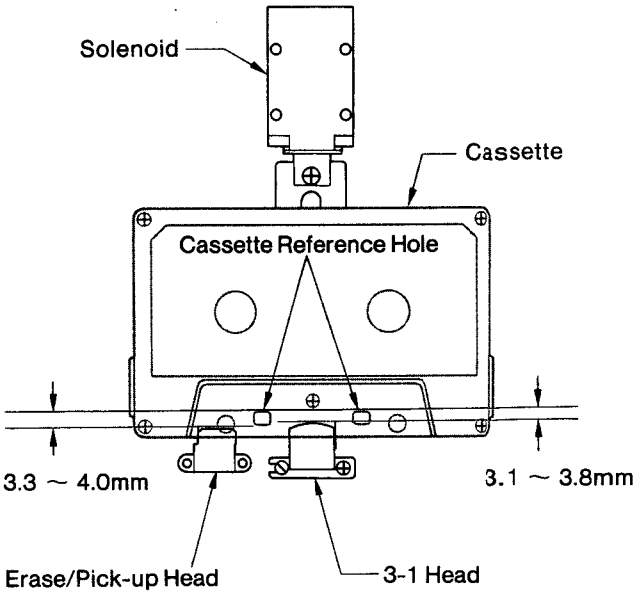
NOTE:
A cassette with the specified hole-head distances marked on it as shown can be used as a facilitating gauge for the Head Position Adjustment. (Do not use a worn cassette.)



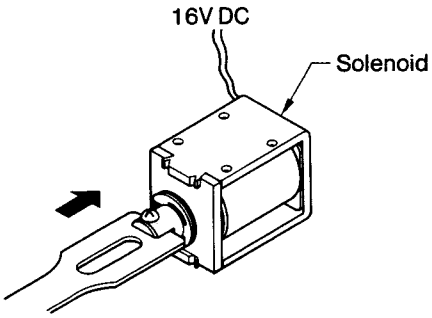
1. The distance between the Cassette Reference Hole and each Head should be as shown with the unit in the playback mode.

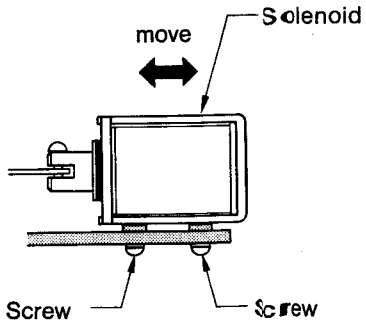
   Erase/Pick-up Head ..... **3.3 ~ 4.0mm**

   3-1 Head ..... **3.1 ~ 3.8mm**



2. Detach the Mechanism Chassis from the unit.
   Loosen the two screws fastening the Solenoid and supply 16V DC to the Solenoid.





3. Adjust each Head to the specified position by moving the Solenoid as illustrated.

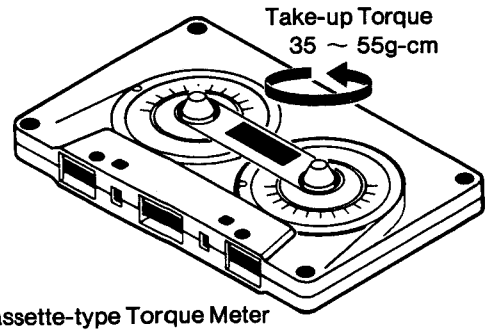
4. After the adjustment, tighten the screws and secure them.

ADJUSTMENTS (Continued)

TAKE-UP TORQUE ADJUSTMENT

1. After the Cabinet Bottom is removed, insert the cassette-type torque meter into the cassette compartment.

2. Set the unit in the playback mode by touching the PLAY button and measure the take-up torque. It should be 35 ~ 55g-cm.

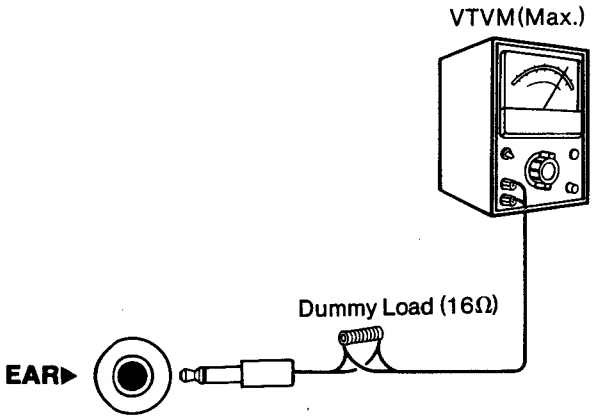


Cassette-type Torque Meter

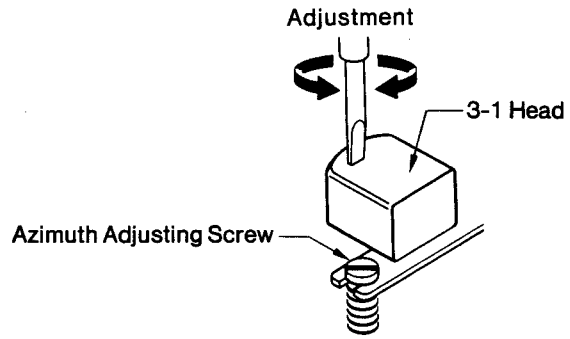
3. If necessary, adjust the take-up torque by turning the potentiometer P201 on the Amplifier P.C.Board to obtain the specified torque.

HEAD AZIMUTH ADJUSTMENT

1. Connect a VTVM to the earphone jack as illustrated and insert a 6.3kHz test tape (Example: TEAC MTT-113) into the cassette compartment.



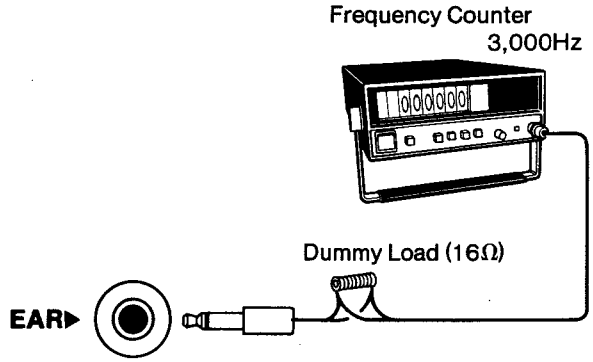
2. While the test tape is being played back by touching the PLAY button, adjust the azimuth adjusting screw until the VTVM reads the maximum.



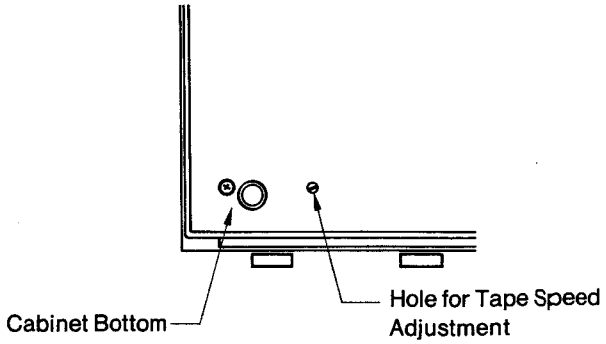
3. After the adjustment, secure the screw with paint or glue.

TAPE SPEED ADJUSTMENT

1. Connect a frequency counter to the earphone jack as illustrated and insert a 3kHz test tape (Example: TEAC MTT-111) into the cassette compartment.



2. While the test tape is being played back by touching the PLAY button, adjust the potentiometer P101 until the frequency counter reads 3,000Hz.



PARTS LIST

PRODUCT SAFETY NOTICE

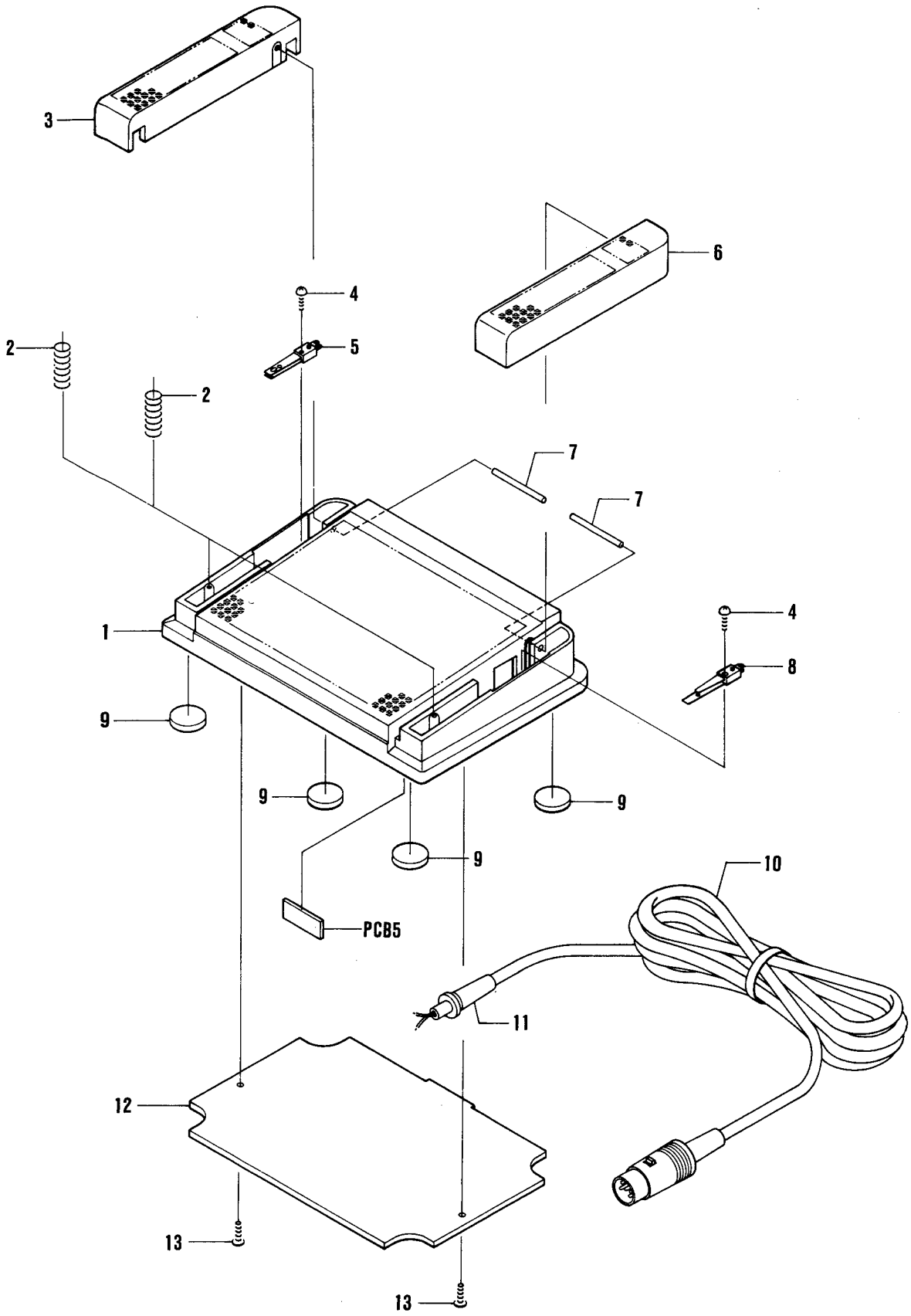
Each precaution in this manual should be followed during servicing. Components identified with the IEC symbol ⚠ in the parts list and the schematic diagram designate components in which safety can be of special significance. When replacing a component identified with ⚠, use only the replacement parts designated, or parts with the same ratings of resistance, wattage or voltage that are designated in the parts list in this manual.
Leakage-current or resistance measurements must be made to determine that exposed parts are acceptably insulated from the supply circuit before returning the product to the customer.

Ref. No.	Part No.	Description	Q'ty
	PACKAGE		
	141 6 1419 66916	Individual Carton	1
	141 6 1429 12100	Tube Accessory	1
	141 6 1449 85000	Pad, Left	1
	141 6 1449 85100	Pad, Right	1
	141 6 2519 13027	Poly Cover 130 x 270	1
	141 6 2519 15690	Poly Cover	1
	141 6 4559 03300	Serial No. Sheet	2
	ACCESSORIES		
	4 1529 70190	Head Set	1
*	4 1929 70128	Completed Foot Control	1
	4 2419 70440	Cassette	1
	142 6 4119 32306	Instruction Book	1
	COMPLETED FOOT CONTROL		
*	4 1929 70128	Completed Foot Control	1
	RM39 3251 GH000	Metal 39kΩ 1/4W ±2%	1
	RM33 3251 GH000	Metal 33kΩ 1/4W ±2%	1
1	141 2 1129 20700	Main Case	1
2	141 2 8549 30100	Spring Button	2
3	141 2 1659 49700	Back Button	1
4	103 3 1202 00811	Screw, Flat Hd. Tapping-2, +M2.0x8	2
5	4 2319 78110	Leaf Switch (Back)	1
6	141 2 1659 49800	Play Button	1
7	141 2 7519 75000	Shaft	1
8	4 2319 78120	Leaf Switch (Play)	1
9	141 2 1749 04500	Foot	4
10	4 2369 75300	Cord with DIN Plug 6P	1
11	141 2 3749 11300	Bushing	1
12	141 2 1259 08400	Plate Buttom	1
13	103 3 1203 00811	Screw, Flat Hd. Tapping-2, +M3.0x8	2
	CABINET		
	141 2 2899 27200	Adhesive Sheet	1
	141 2 2899 27300	Adhesive Sheet	1
	141 2 2899 27400	Adhesive Sheet	1
	141 2 2899 28700	Adhesive Sheet	1
	141 2 4729 05300	Wire Band	10
	4 2379 70650	Ring Terminal	2
CA1	141 2 1319 28401	Window	1
CA2	141 2 1119 84407	Cabinet Top	1
CA3	141 2 4729 04100	Lug	3
CA4	141 0 5519 08500	Eject Gear Assy	1
CA5	141 2 1429 11700	Badge	1
CA6	141 2 1449 53100	Lid Panel	1
CA7	141 2 1319 28300	Clear Window	1
CA8	141 2 8549 06101	Spring, Cassette Lid	1

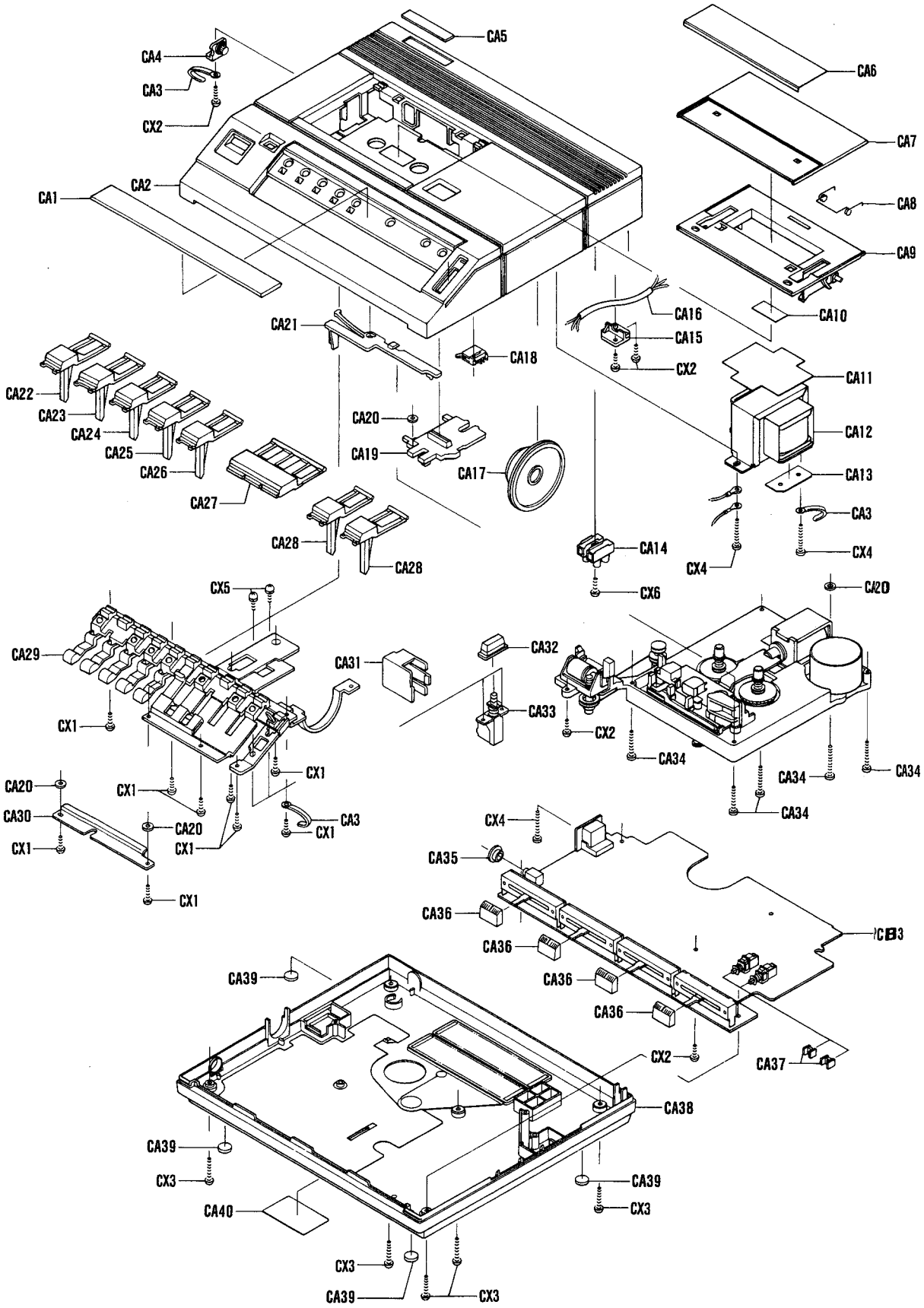
Ref. No.	Part No.	Description	Q'ty
CA9	141 2 1249 33900	Cassette Lid	1
CA10	141 2 1519 00300	Reflection, Alminum	1
CA11	141 2 3229 41500	Heat Shield Plate	1
CA12	⚠ 4 2519 73752	Power Transformer EV2 [T1]	1
CA13	141 2 4359 32500	Insulator, Trans	1
CA14	4 2379 70560	Terminal	1
CA15	141 2 3899 12700	Clamp, Power Cord	1
CA16	⚠ 4 2439 70350	Power Cord	1
CA17	4 1519 71450	Speaker (16Ω) [SP1]	1
CA18	4 2319 75780	Lever Switch (Eject) [S11]	1
CA19	141 2 1649 20000	Eject Lever	1
CA20	141 2 4539 31900	Washer	4
CA21	141 2 7419 84600	Cassette Lid Lock	1
CA22	141 2 1659 09101	Select Button	1
CA23	141 2 1659 09102	Select Button	1
CA24	141 2 1659 09103	Select Button	1
CA25	141 2 1659 09104	Select Button	1
CA26	141 2 1659 09105	Select Button	1
CA27	141 2 1449 54300	Front Cover	1
CA28	141 2 1659 09100	Select Button	2
CA29	141 0 1149 10104	Frame Assy	1
	Following P.C.B. Assy (PCB3) is included in Frame Assy.		
CA30	141 2 2149 19800	Stopper Plate	1
CA31	141 2 2419 27900	Switch Cover	1
CA32	141 2 1659 09000	Knob, Power Switch	1
CA33	⚠ 4 2312 02520	Switch Push Power [S10]	1
CA34	141 2 4219 13000	Screw	5
CA35	141 2 1539 10701	Jack Plate	1
CA36	141 2 1649 19900	Knob, Volume	4
CA37	141 2 3659 19300	Switch Guide	2
CA38	141 0 1119 89601	Cabinet Bottom Assy	1
CA39	141 2 1749 02600	Foot	4
CA40	141 2 1419 18908	Rating Plate	1
CX1	143 3 1303 00811	Screw, Pan Hd. Tapping-B +M3.0x8	12
CX2	143 3 1303 01211	Screw, Pan Hd. Tapping-B +M3.0x12	5
CX3	143 3 1303 02018	Screw, Pan Hd. Tapping-B +M3.0x20	5
CX4	143 3 1303 03018	Screw, Pan Hd. Tapping-B +M3.0x30	3
CX5	131 3 1303 00611	Screw, Pan Hd. C SW +M3.0x6	2
CX6	143 3 1303 01811	Screw, Pan Hd. Tapping +M3.0x18	1
PCB1	4 1329 78830	Amplifier P.C.B. Assy	1
PCB2	4 1329 78960	Sub Amplifier P.C.B. Assy	1
PCB3	141 0 1149 10104	Frame Assy	1

NOTES:
1. Parts order must contain Model Number, Part Number and Description.
2. Ordering quantity of screws and resistors must be multiple of 10 pcs.

FOOT CONTROL EXPLODED VIEW



CABINET EXPLODED VIEW



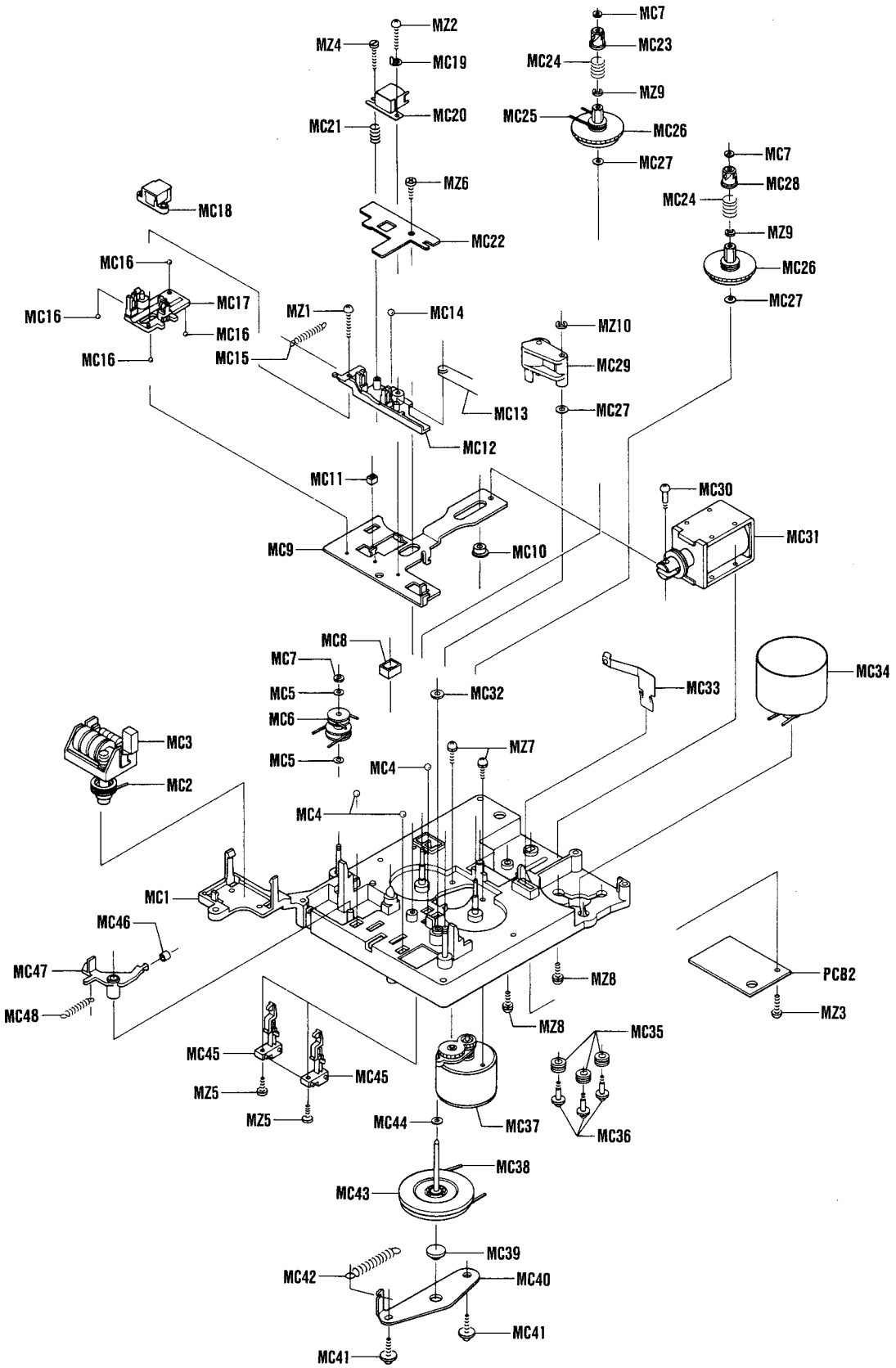
MECHANISM PARTS LIST

Ref. No.	Part No.	Description	Q'ty
	MECHANISM		
	4 2359 76101	Connector Assy 9P [CN1]	1
	4 2359 76102	Connector Assy 9P [CN2]	1
	4 2359 75910	Connector Assy 4P [CN3]	1
	4 2359 75767	Connector Assy 8P [CN4]	1
	4 2359 76060	Ring Terminal Assy	1
MC1	141 0 3119 22200	Chassis Assy	1
MC2	141 2 5649 12800	Counter Belt	1
MC3	141 2 8119 08801	Counter	1
MC4	141 2 8259 04800	Ball	3
MC5	141 2 4539 08601	Washer	2
MC6	141 2 6619 04800	Counter Pulley	1
MC7	141 2 4539 27800	Washer	3
MC8	141 2 4459 29800	Chassis Damper	1
MC9	141 2 7319 55300	Slide Base	1
MC10	141 2 3529 37600	Guide, Slide Base	1
MC11	141 2 4459 29900	Damper, Slide Base	1
MC12	141 2 3769 13600	Spacer, R/P Head	1
MC13	141 2 8529 13100	Spring, Pinch Roller	1
MC14	141 2 8259 11200	Ball	1
MC15	141 2 8519 92700	Spring, Head Base	1
MC16	141 2 8259 04300	Ball	4
MC17	141 2 7319 55400	Base, Erase Head	1
MC18	4 2429 72290	Erase Head (Erase/Pick-up) [HD2]	1
MC19	141 2 4729 07000	Lug	1
MC20	4 2429 72280	R/P Head (3-1 Head) [HD1]	1
MC21	141 2 8519 89000	Spring, Motor Adjust	1
MC22	141 2 8539 48100	Spring, Slide Base	1
MC23	141 2 5319 13000	Fin, Supply Reel	1
MC24	141 2 8519 34400	Spring, Stop Lever	2
MC25	141 2 5649 09700	Belt, Reel	1
MC26	141 2 5319 12900	Reel Disk	2
MC27	141 2 4539 21100	Washer	3
MC28	141 2 5319 13100	Fin, Take-up Reel	1
MC29	141 0 5419 03900	Pinch Roller Assy	1
MC30	141 2 4219 14400	Screw	1
MC31	4 2649 70480	Solenoid [SL1]	1
MC32	141 2 4539 06900	Washer	1
MC33	141 2 8539 48000	Spring, Cassette	1
MC34	4 5279 71250	Main Motor [M1]	1
MC35	141 2 4459 25100	Cushion, Motor	3
MC36	141 2 4219 22000	Screw	3
MC37	141 0 3799 01201	Completed Gear Motor [M2]	1
MC38	141 2 5649 21400	Drive Belt	1
MC39	141 2 5739 06400	Bush, Flywheel	1
MC40	141 2 3169 20300	Flywheel Support	1
MC41	141 2 4219 14200	Screw	2
MC42	141 2 8519 24200	Spring, Lock Lever	1
MC43	141 2 5219 15100	Flywheel	1
MC44	141 2 4539 21800	Washer	1
MC45	4 2319 75570	Leaf Switch (Cassette) [S12]	1
MC45	4 2319 75570	Leaf Switch (Tab) [S13]	1
MC46	141 2 4459 30000	Damper, Lock Lever	1
MC47	141 2 7419 84500	Lock Lever	1
MC48	141 2 8519 57300	Spring, Stop Lever	1
MZ1	101 3 1302 00811	Screw, Pan Hd., +M2.0x8	1
MZ2	101 3 1302 01211	Screw, Pan Hd., +M2.0x12	1
MZ3	101 3 1303 01011	Screw, Pan Hd., +M3.0x10	1
MZ4	101 3 2502 01211	Screw, Cylinder Hd., -M2.0x12	1
MZ5	103 3 1702 60811	Screw, Bind Hd. Tapping-2, +M2.6x8	2
MZ6	103 3 1703 00818	Screw, Bind Hd. Tapping-2, +M3.0x8	1
MZ7	131 3 1302 60811	Screw, Pan Hd. C SW, +M2.6x8	2
MZ8	131 3 1303 00811	Screw, Pan Hd. C SW, +M3.0x8	2
MZ9	112 3 1301 50040	E Ring, M1.5	2
MZ10	112 3 1302 50040	E Ring, M2.0	1

NOTES:

1. Parts order must contain Model Number, Part Number and Description.
2. Ordering quantity of screws and resistors must be multiple of 10 pcs.

MECHANISM EXPLODED VIEW



P.C.BOARD PARTS LIST

Ref. No.	Part No.	Description	Q'ty
	AMPLIFIER P.C.B. ASSY		
PCB1	4 1329 78830	Amplifier P.C.B. Assy	1
	141 2 3689 02901	Bracket, Transistor (for Q20)	1
	141 2 3689 08500	Bracket, Transistor (for Q20)	1
	141 2 4729 04700	Staple, 10mm	70
CN1	4 2369 71611	Connector 9P	1
CN2	4 2369 71611	Connector 9P	1
CN3	4 2369 71571	Connector 4P	1
RE1	4 2329 70300	Relay (Cue)	1
S1	4 2319 75790	Touch Switch (Erase)	1
S2	4 2319 75790	Touch Switch (Stop)	1
S3	4 2319 75790	Touch Switch (Rewind)	1
S4	4 2319 75790	Touch Switch (F.FWD)	1
S5	4 2319 75790	Touch Switch (Play)	1
S8	4 2319 75712	Push Switch (Speaker)	1
S9	4 2319 75712	Push Switch (Search)	1
J1	4 2352 01070	DIN Socket 6P (Remote Control)	1
J2	4 2359 73470	1P Jack (Earphone)	1
L2	4 2532 00310	Choke Coil, 220μH	1
L101	4 2539 70301	Micro Inductor	1
VR1	4 2229 73962	Slide Volume (Tone/A-5kΩ)	1
VR2	4 2229 73960	Slide Volume (Volume/A-10kΩ)	1
VR3	4 2229 73961	Slide Volume (Tape Speed/B-50kΩ)	1
VR4	4 2229 73962	Slide Volume (Backspace/A-5kΩ)	1
P101	4 2229 72970	Potentiometer (B-50kΩ)	1
P201	4 2229 73160	Potentiometer (B-200Ω)	1
CF1	4 2539 71230	Resonator, CSA 358MS	1
D1	202 5 2810 44210	Diode, DS 442	1
D2	202 5 2810 44210	Diode, DS 442	1
D3	202 5 2810 44210	Diode, DS 442	1
D5	202 5 2810 44210	Diode, DS 442	1
D6	202 5 2810 44210	Diode, DS 442	1
D7	202 5 2810 44210	Diode, DS 442	1
D8	202 5 3210 12013	Diode, GZA 12	1
D9	202 5 3210 05612	Diode, GZA 5.6	1
D10	202 5 2300 01710	Diode, DS 17	1
D11	202 5 2300 01810	Diode, DS 18	1
D19	202 5 2470 13540	Diode, DS135	1
D20	202 5 3210 09111	Diode, GZA 9.1	1
D21	4 2029 70461	Diode, 1S2473	1
D30	202 5 3210 05112	Diode, GZA 5.1	1
D101	4 2029 70461	Diode, 1S2473	1
D201	202 5 2810 44210	Diode, DS 442	1
D202	202 5 2810 44210	Diode, DS 442	1
Q1	203 5 5100 53650	Transistor, 2SC 536	1
Q7	203 5 5100 53650	Transistor, 2SC 536	1
Q8	203 5 5100 53660	Transistor, 2SC 536	1
Q9	203 5 5100 53660	Transistor, 2SC 536	1
Q10	203 5 5100 53660	Transistor, 2SC 536	1
Q12	203 5 5100 53660	Transistor, 2SC 536	1
Q13	203 5 5100 53660	Transistor, 2SC 536	1
Q16	203 5 7200 60850	Transistor, 2SA 608	1
Q17	203 5 7200 60860	Transistor, 2SA 608	1
Q18	203 5 7200 60860	Transistor, 2SA 608	1
Q19	203 5 6870 54560	Transistor, 2SD 545	1
Q20	203 5 8550 31360	Transistor, 2SD 313	1
Q21	203 5 7200 60860	Transistor, 2SA 608	1
Q22	203 5 6740 40060	Transistor, 2SD400	1
Q23	203 5 6900 40060	Transistor, 2SD400	1
Q24	203 5 5100 53650	Transistor, 2SC 536	1
Q25	203 5 5100 53650	Transistor, 2SC 536	1
Q26	203 5 5100 53650	Transistor, 2SC 536	1
Q27	203 5 5100 53650	Transistor, 2SC 536	1
Q30	203 5 5100 53650	Transistor, 2SC 536	1

Ref. No.	Part No.	Description			Q'ty
Q33	203 5 5100 53650	Transistor, 2SC 536			1
Q104	203 5 5100 53660	Transistor, 2SC 536			1
Q105	203 5 6870 54560	Transistor, 2SD 545			1
Q201	203 5 6900 40060	Transistor, 2SD400			1
Q204	203 5 4570 73460	Transistor, 2SD 734			1
Q205	203 5 4570 73460	Transistor, 2SD 734			1
Q206	203 5 5000 53660	Transistor, 2SC 536			1
Q207	203 5 5100 53660	Transistor, 2SC 536			1
Q208	203 5 5100 53660	Transistor, 2SC 536			1
Q209	203 5 5100 53660	Transistor, 2SC 536			1
IC1	206 5 1334 16010	IC, LA4160			1
IC2	4 2069 71820	IC, MB8843-1077M			1
IC3	206 5 9474 06610	IC, LC4066B			1
IC5	4 2069 71880	IC, AN6876			1
IC101	206 5 2491 60110	IC, LB 1601			1
C3	CD4 7 5100 0001V	Electrolytic	4.7μF	10V	1
C4	CC1 0 2500 KE00C	Ceramic	0.001μF	50V ±10%	1
C5	CC2 2 0500 KE00C	Ceramic	22pF	50V ±10%	1
C6	CM2 2 3500 K00SV	Mylar	0.022μF	50V ±10%	1
C7	CM6 8 2500 K00SV	Mylar	0.0068μF	50V ±10%	1
C8	CD1 0 6100 0001V	Electrolytic	10μF	10V	1
C9	CD1 0 5100 0001V	Electrolytic	1μF	10V	1
C10	CD2 2 6100 0001V	Electrolytic	22μF	10V	1
C11	CD1 0 6100 0001V	Electrolytic	10μF	10V	1
C12	CC1 0 2500 KE00C	Ceramic	0.001μF	50V ±10%	1
C13	CD1 0 7100 0001V	Electrolytic	100μF	10V	1
C14	CD1 0 7100 0001V	Electrolytic	100μF	10V	1
C15	CD1 0 7100 0001V	Electrolytic	100μF	10V	1
C16	CD1 0 7100 0001V	Electrolytic	100μF	10V	1
C17	CM1 5 4500 K00SV	Mylar	0.15μF	50V ±10%	1
C18	CD2 2 7100 0001V	Electrolytic	220μF	10V	1
C19	CD2 2 7160 0003V	Electrolytic	220μF	16V	1
C20	CA1 0 4100 M000V	Aluminum	0.1μF	10V ±20%	1
C23	CD1 0 7100 0001V	Electrolytic	100μF	10V	1
C24	CD1 0 4100 0002V	Electrolytic	0.1μF	10V	1
C35	CM1 0 4500 K00SV	Mylar	0.1μF	50V ±10%	1
C36	CD1 0 5100 0001V	Electrolytic	1μF	10V	1
C37	CM1 0 4500 K00SV	Mylar	0.1μF	50V ±10%	1
C39	CD1 0 7100 0001V	Electrolytic	100μF	10V	1
C41	CC1 0 1500 KE00C	Ceramic	100pF	50V ±10%	1
C42	CC1 0 1500 KE00C	Ceramic	100pF	50V ±10%	1
C43	CD2 2 6100 0001V	Electrolytic	22μF	10V	1
C44	CD1 0 7100 0001V	Electrolytic	100μF	10V	1
C45	CD1 0 7160 0001V	Electrolytic	100μF	16V	1
C46	CD2 2 8250 0001V	Electrolytic	2200μF	25V	1
C48	4 2239 70760	Boundary	0.2μF	12V +80,-20%	1
C49	CD2 2 6100 0001V	Electrolytic	22μF	10V	1
C51	CM1 0 3500 K00SV	Mylar	0.01μF	50V ±10%	1
C52	CD4 7 6100 0001V	Electrolytic	47μF	10V	1
C70	CC1 0 3500 KE00C	Ceramic	0.01μF	50V ±10%	1
C71	CC1 0 3500 KE00C	Ceramic	0.01μF	50V ±10%	1
C101	CD1 0 5160 0001V	Electrolytic	1μF	16V	1
C102	CA1 0 4100 M000V	Aluminum	0.1μF	10V ±20%	1
C103	4 2239 70702	Capacitor	0.01μF		1
C104	CI3 3 2250 KE00C	Boundary	0.0033μF	25V ±10%	1
C105	CI3 3 2250 KE00C	Boundary	0.0033μF	25V ±10%	1
C106	CD1 0 7160 0001V	Electrolytic	100μF	16V	1
C107	CD1 0 6160 0001V	Electrolytic	10μF	16V	1
C201	CM1 0 4500 K00SV	Mylar	0.1μF	50V ±10%	1
C303	CC2 2 3500 KE00C	Ceramic	0.022μF	50V ±10%	1
R4	RD4 7 3251 JM000	Carbon	47kΩ	1/4W ±5%	1
R5	RD1 0 3251 JM000	Carbon	10kΩ	1/4W ±5%	1
R6	RD2 2 2251 JM000	Carbon	2.2kΩ	1/4W ±5%	1
R7	RD4 7 3251 JN000	Carbon	47kΩ	1/4W ±5%	1

P.C.BOARD PARTS LIST (Continued)

Ref. No.	Part No.	Description			Q'ty
R8	RD2 2 3251 JM000	Carbon	22kΩ	1/4W ±5%	1
R9	RD2 2 3251 JM000	Carbon	22kΩ	1/4W ±5%	1
R10	RD5 6 3251 JM000	Carbon	56kΩ	1/4W ±5%	1
R11	RD1 0 4251 JM000	Carbon	100kΩ	1/4W ±5%	1
R12	RD2 2 0251 JM000	Carbon	22Ω	1/4W ±5%	1
R13	RD6 8 1251 JM000	Carbon	680Ω	1/4W ±5%	1
R14	RD3 3 3251 JM000	Carbon	33kΩ	1/4W ±5%	1
R16	RD2 2 3251 JM000	Carbon	22kΩ	1/4W ±5%	1
R17	RD1 5 2251 JM000	Carbon	1.5kΩ	1/4W ±5%	1
R18	RD1 0 2251 JM000	Carbon	1kΩ	1/4W ±5%	1
R19	RD5 1 0251 JM000	Carbon	51Ω	1/4W ±5%	1
R20	RD1 0 1251 JM000	Carbon	100Ω	1/4W ±5%	1
R21	RD2 2 2251 JM000	Carbon	2.2kΩ	1/4W ±5%	1
R23	RD2 7 3251 JM000	Carbon	27kΩ	1/4W ±5%	1
R24	RD1 0 2251 JM000	Carbon	1kΩ	1/4W ±5%	1
R26	RD4 7 2251 JN000	Carbon	4.7kΩ	1/4W ±5%	1
R40	RD2 2 3251 JM000	Carbon	22kΩ	1/4W ±5%	1
R44	RD2 2 3251 JM000	Carbon	22kΩ	1/4W ±5%	1
R45	RD1 0 5251 JM000	Carbon	1MΩ	1/4W ±5%	1
R46	RD2 7 1251 JM000	Carbon	270Ω	1/4W ±5%	1
R47	RD1 0 3251 JM000	Carbon	10kΩ	1/4W ±5%	1
R48	RD3 3 2251 JM000	Carbon	3.3kΩ	1/4W ±5%	1
R49	RD2 2 3251 JM000	Carbon	22kΩ	1/4W ±5%	1
R50	RD2 2 3251 JM000	Carbon	22kΩ	1/4W ±5%	1
R51	RD2 2 3251 JM000	Carbon	22kΩ	1/4W ±5%	1
R52	RE6 2 0502 KH000	Cement	62Ω	5W ±10%	1
R53	RD1 0 2251 JM000	Carbon	1kΩ	1/4W ±5%	1
R54	RD2 2 3251 JM000	Carbon	22kΩ	1/4W ±5%	1
R56	RD1 0 3251 JM000	Carbon	10kΩ	1/4W ±5%	1
R57	RD1 0 3251 JM000	Carbon	10kΩ	1/4W ±5%	1
R58	RD4 7 3251 JM000	Carbon	47kΩ	1/4W ±5%	1
R59	RD1 0 2251 JM000	Carbon	1kΩ	1/4W ±5%	1
R60	RD1 0 3251 JM000	Carbon	10kΩ	1/4W ±5%	1
R61	RD1 0 4251 JM000	Carbon	100kΩ	1/4W ±5%	1
R62	RD1 5 2251 JM000	Carbon	1.5kΩ	1/4W ±5%	1
R63	RD2 4 2251 JM000	Carbon	2.4kΩ	1/4W ±5%	1
R67	RH6 8 1102 JH000	Metal	680Ω	1W ±5%	1
R68	RD1 2 2251 JM000	Carbon	1.2kΩ	1/4W ±5%	1
R69	RD1 0 3251 JM000	Carbon	10kΩ	1/4W ±5%	1
R70	RD4 7 1251 JM000	Carbon	470Ω	1/4W ±5%	1
R71	RD2 2 3251 JM000	Carbon	22kΩ	1/4W ±5%	1
R72	RD2 2 3251 JM000	Carbon	22kΩ	1/4W ±5%	1
R73	RD4 7 0251 JM000	Carbon	47Ω	1/4W ±5%	1
R75	RD2 2 3251 JM000	Carbon	22kΩ	1/4W ±5%	1
R76	RD4 7 1251 JM000	Carbon	470Ω	1/4W ±5%	1
R77	RD2 2 3251 JM000	Carbon	22kΩ	1/4W ±5%	1
R78	RD2 2 3251 JM000	Carbon	22kΩ	1/4W ±5%	1
R79	RD4 7 1251 JM000	Carbon	470Ω	1/4W ±5%	1
R80	RD2 2 3251 JM000	Carbon	22kΩ	1/4W ±5%	1
R81	RD4 7 1251 JM000	Carbon	470Ω	1/4W ±5%	1
R82	RD1 0 3251 JM000	Carbon	10kΩ	1/4W ±5%	1
R83	RD1 0 3251 JM000	Carbon	10kΩ	1/4W ±5%	1
R84	RD2 7 1251 JM000	Carbon	270Ω	1/4W ±5%	1
R85	RD1 0 3251 JN000	Carbon	10kΩ	1/4W ±5%	1
R86	RH6 8 0102 JH000	Metal	68Ω	1W ±5%	1
R87	RD4 7 1251 JM000	Carbon	470Ω	1/4W ±5%	1
R88	RD1 0 4251 JM000	Carbon	100kΩ	1/4W ±5%	1
R91	RD4 7 1251 JM000	Carbon	470Ω	1/4W ±5%	1
R93	RD4 7 3251 JM000	Carbon	47kΩ	1/4W ±5%	1
R95	RD2 2 3251 JM000	Carbon	22kΩ	1/4W ±5%	1
R96	RD4 7 3251 JM000	Carbon	47kΩ	1/4W ±5%	1
R98	RD1 2 2251 JN000	Carbon	1.2kΩ	1/4W ±5%	1
R99	RD1 0 2251 JN000	Carbon	1kΩ	1/4W ±5%	1
R101	RD8 2 3251 JM000	Carbon	82kΩ	1/4W ±5%	1
R107	RD2 2 2251 JM000	Carbon	2.2kΩ	1/4W ±5%	1
R108	RD2 2 3251 JM000	Carbon	22kΩ	1/4W ±5%	1
R109	RD1 2 3251 JM000	Carbon	12kΩ	1/4W ±5%	1
R110	RD1 0 4251 JM000	Carbon	100kΩ	1/4W ±5%	1
R201	RH1 5 0102 JH000	Metal	15Ω	1W ±5%	1
R202	RD2 2 1251 JN000	Carbon	220Ω	1/4W ±5%	1
R203	RD1 0 1251 JN000	Carbon	100Ω	1/4W ±5%	1
R204	RD1 2 2251 JN000	Carbon	1.2kΩ	1/4W ±5%	1
R205	RD1 0 2251 JM000	Carbon	1kΩ	1/4W ±5%	1
R206	RD5 6 1251 JN000	Carbon	560Ω	1/4W ±5%	1
R207	RD5 6 1251 JM000	Carbon	560Ω	1/4W ±5%	1
R210	RD2 2 3251 JN000	Carbon	22kΩ	1/4W ±5%	1
R211	RD4 7 3251 JN000	Carbon	47kΩ	1/4W ±5%	1
R212	RD2 2 3251 JN000	Carbon	22kΩ	1/4W ±5%	1
R213	RD1 0 4251 JN000	Carbon	100kΩ	1/4W ±5%	1
R214	RD1 0 3251 JN000	Carbon	10kΩ	1/4W ±5%	1
R215	RD1 0 3251 JN000	Carbon	10kΩ	1/4W ±5%	1
R300	RD2 2 3251 JN000	Carbon	22kΩ	1/4W ±5%	1

SUB AMPLIFIER P.C.B. ASSY

PCB2	4 1329 78960	Sub Amplifier P.C.B. Assy			1
	4 2269 38600	PCB, Sub Amplifier			1
CN4	4 2369 71881	Connector 8P			1
Q202	203 5 4580 69860	Transistor, 2SA 698			1
Q203	203 5 4580 69860	Transistor, 2SA 698			1
Q210	203 5 4570 73460	Transistor, 2SD 734			1
Q211	203 5 4570 73460	Transistor, 2SA 734			1
Q301	203 5 7200 60860	Transistor, 2SA 608			1
Q302	203 5 5100 53650	Transistor, 2SC 536			1
IC201	206 5 3285 52210	IC, LA5522			1
C203	CC2 2 3500 ZG00C	Ceramic	0.022μF	50V +80,-20%	1
C220	CD4 7 5500 0001V	Electrolytic	4.7μF	50V	1
C301	CD2 2 6100 0001V	Electrolytic	22μF	10V	1
R208	RD5 6 1251 JN000	Carbon	560Ω	1/4W ±5%	1
R209	RD5 6 1251 JN000	Carbon	560Ω	1/4W ±5%	1
R220	RD5 6 1251 JN000	Carbon	560Ω	1/4W ±5%	1
R221	RD5 6 1251 JN000	Carbon	560Ω	1/4W ±5%	1
R222	RD2 7 2251 JN000	Carbon	2.7kΩ	1/4W ±5%	1
R223	RD3 3 2251 JN000	Carbon	3.3kΩ	1/4W ±5%	1
R224	RD2 0 3251 JN000	Carbon	20kΩ	1/4W ±5%	1
R301	RD4 7 3251 JN000	Carbon	47kΩ	1/4W ±5%	1
R302	RD4 7 3251 JN000	Carbon	47kΩ	1/4W ±5%	1
R303	RD1 5 2251 JN000	Carbon	1.5kΩ	1/4W ±5%	1
R304	RD2 2 3251 JN000	Carbon	22kΩ	1/4W ±5%	1
R305	RD1 0 3251 JN000	Carbon	10kΩ	1/4W ±5%	1

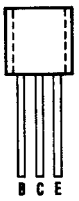
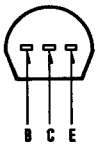
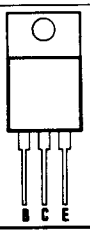
FRAME ASSY

PCB3	141 0 1149 10104	Frame Assy	1
	4 2269 38271	PCB, LED	1
	141 2 1149 29001	Frame	1
D12	202 5 9150 02412	LED, SLP24BT (Search)	1
D13	4 2029 73810	LED, SLP255B (Power)	1
D14	202 5 9150 02412	LED, SLP24BT (F.FWD)	1
D15	202 5 9150 02412	LED, SLP24BT (Play)	1
D17	202 5 9150 02412	LED, SLP24BT (Rewind)	1
D18	202 5 9150 02412	LED, SLP24BT (Erase)	1

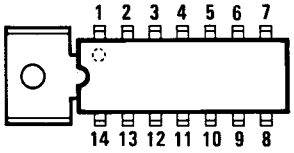
NOTES:

1. Parts order must contain Model Number, Part Number and Description.
2. Ordering quantity of screws and resistors must be multiple of 10 pcs.

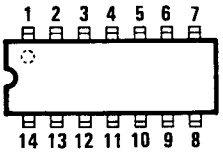
IC & TRANSISTOR LEAD IDENTIFICATION

TRANSISTOR	FRONT VIEW	BOTTOM VIEW
2SA608 2SB698 2SC536 2SD400 2SD734		
2SD313		
TERMINAL NAME		
B → BASE C → COLLECTOR E → EMITTER		

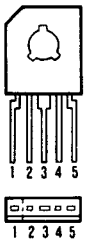
LA4160 , LB1601B BOTTOM VIEW



LC4066B BOTTOM VIEW

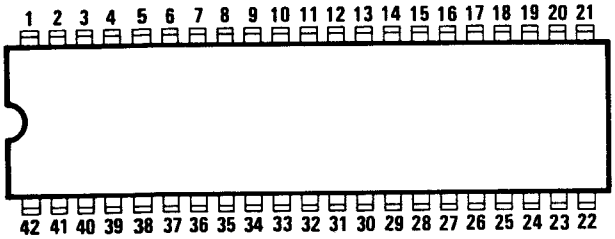


LA5522 FRONT VIEW

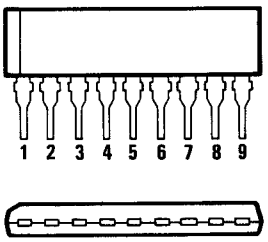


BOTTOM VIEW

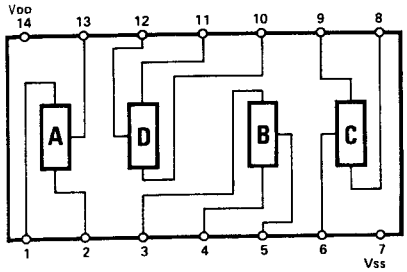
MB8843-1077M BOTTOM VIEW



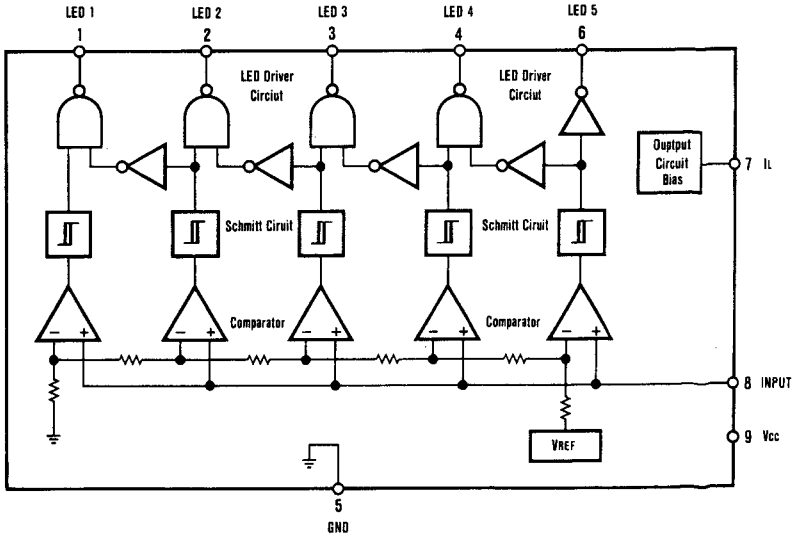
AN6876 FRONT VIEW BOTTOM VIEW



LC4066B BLOCK DIAGRAM

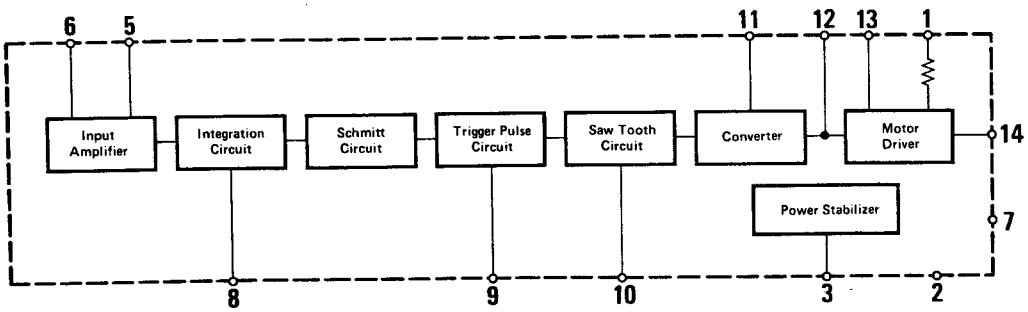


AN6876 BLOCK DIAGRAM

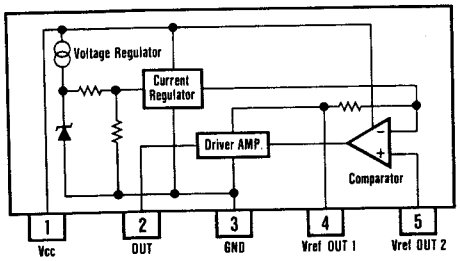


IC & TRANSISTOR LEAD IDENTIFICATION (Continued)

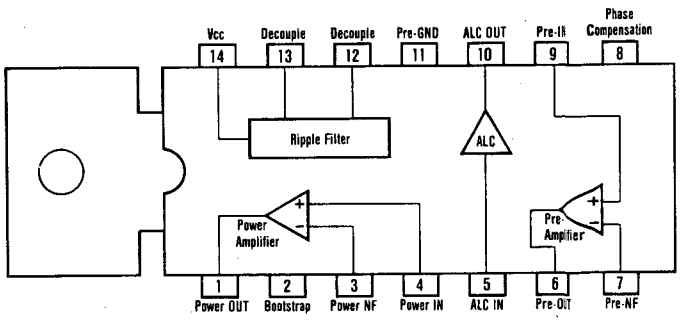
LB1601B BLOCK DIAGRAM



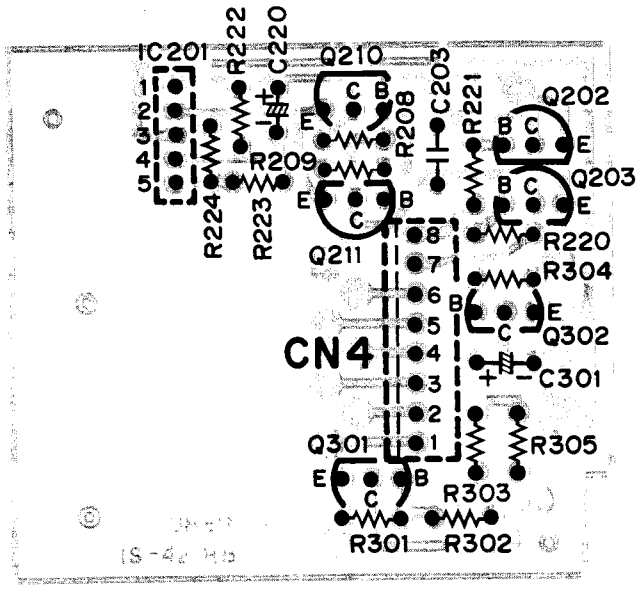
LA5522 BLOCK DIAGRAM



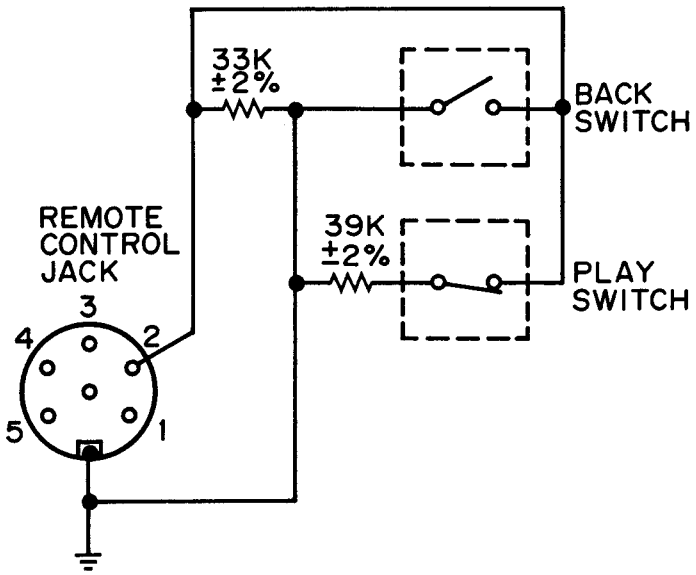
LA4160 BLOCK DIAGRAM



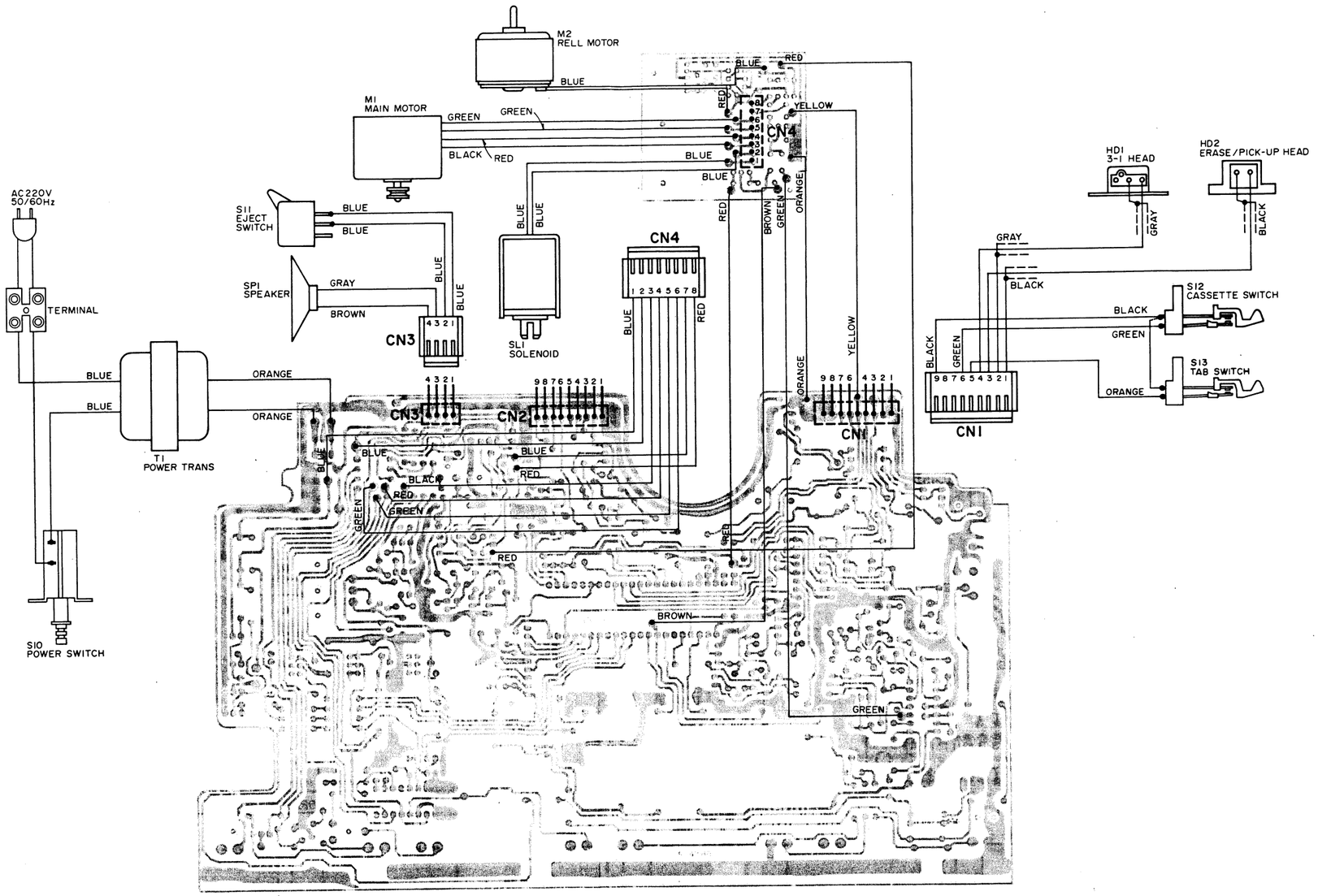
SUB AMPLIFIER P.C.BOARD

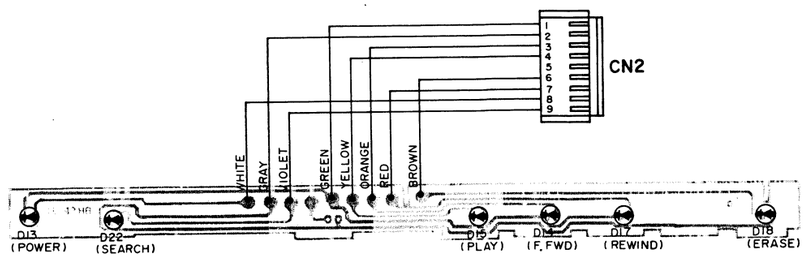


FOOT CONTROL SCHEMATIC DIAGRAM

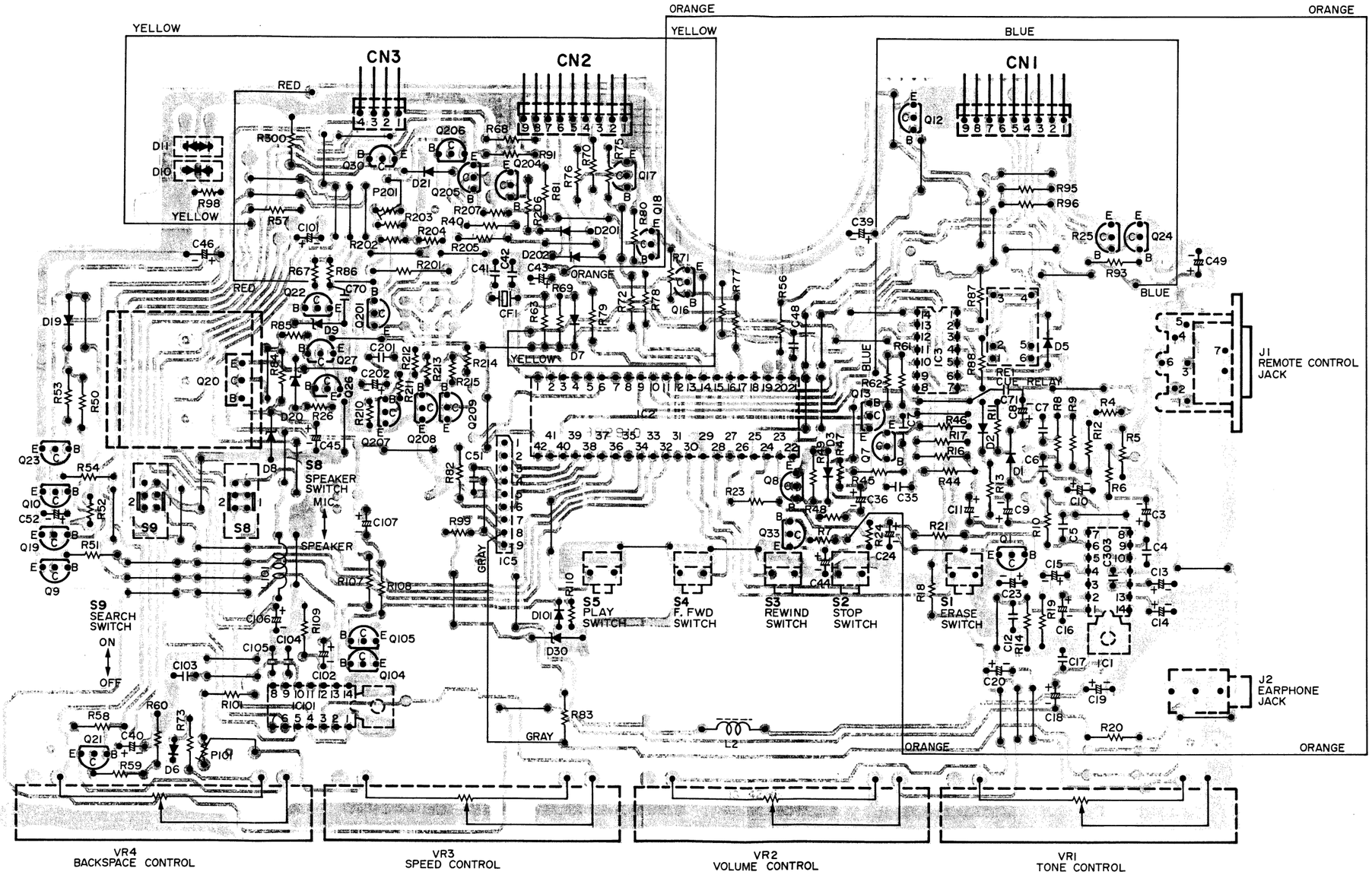


WIRING DIAGRAM





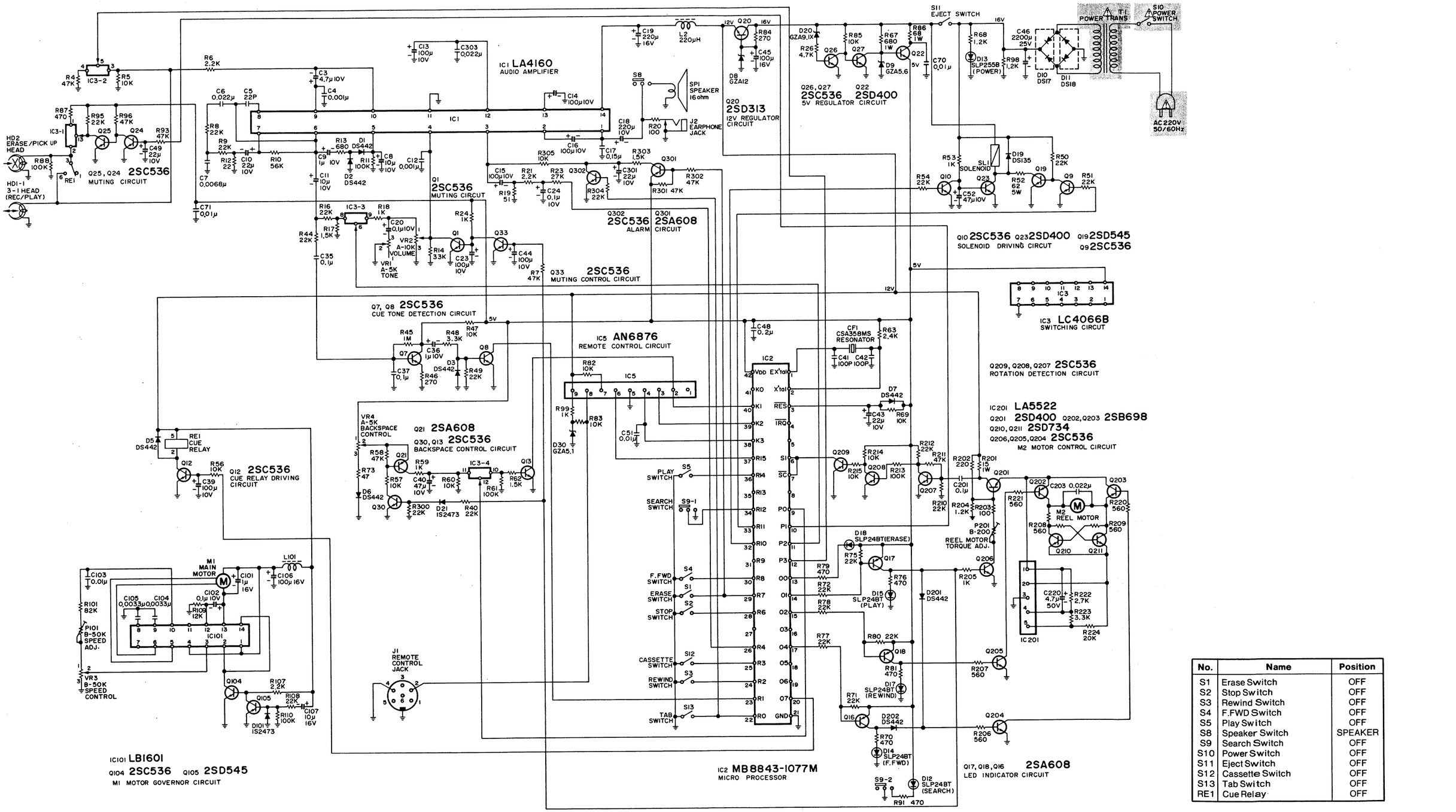
AMPLIFIER P.C.BOARD



PRODUCT SAFETY NOTICE

Each precaution in this manual should be followed during servicing. Components identified with the IEC symbol ⚠ in the parts list and the schematic diagram designate components in which safety can be of special significance. When replacing a component identified with ⚠, use only the replacement parts designated, or parts with the same ratings of resistance, wattage or voltage that are designated in the parts list in this manual.
Leakage-current or resistance measurements must be made to determine that exposed parts are acceptably insulated from the supply circuit before returning the product to the customer.

SCHEMATIC DIAGRAM



No.	Name	Position
S1	Erase Switch	OFF
S2	Stop Switch	OFF
S3	Rewind Switch	OFF
S4	F.FWD Switch	OFF
S5	Play Switch	OFF
S8	Speaker Switch	SPEAKER
S9	Search Switch	OFF
S10	Power Switch	OFF
S11	Eject Switch	OFF
S12	Cassette Switch	OFF
S13	Tab Switch	OFF
RE1	Cue Relay	OFF

PRODUCTION CHANGE NOTICE

SANYO

Date:August,9,1990

Please add this notice to the Service Manuals listed below.

MEMO-SCRIBER

TRC9010

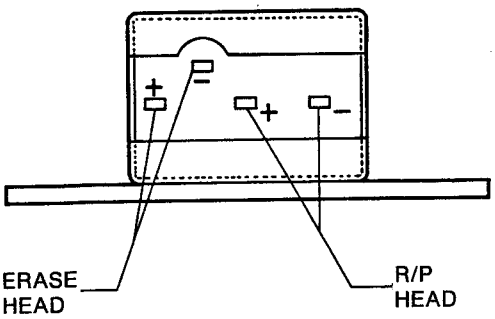
Effective from: Serial No. Running Change

(EUROPE) **REF:WM-13150** **Issue Number 1**

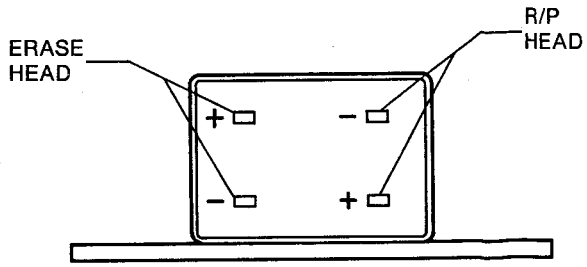
The following changes have been made in the production of the unit listed above.

No.	Page or Section		Ref. No.	Parts No.	Description	Q'ty	Remarks
1	Mechanism Parts List	from	MC20	4 2429 72280	R/P Head (3-1 Head) [HD1]	1	
		to	MC20	620 023 6720	R/P Head (3-1 Head) [HD1]	1	

BEFORE



AFTER



Reason of change: Improvement of Performance

SANYO Electric Co., ltd.
OSAKA, JAPAN

Augast/'90/500/H **Printed in Japan**

REFERENCE No. WM-57137N

PRODUCTION CHANGE NOTICE

SANYO

Date:August,8,1990

Please add this notice to the Service Manuals listed below.

MEMO-SCRIBER

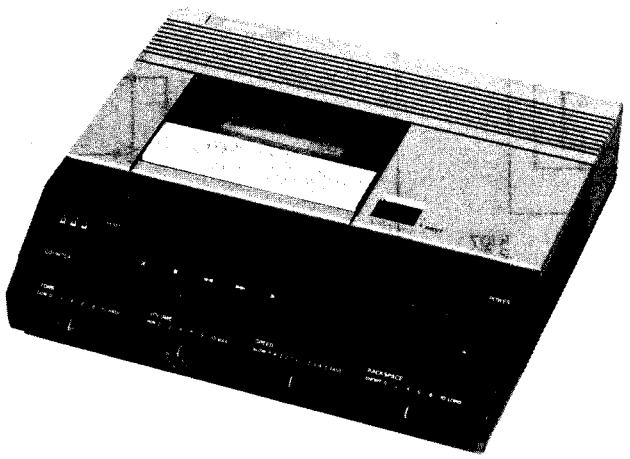
TRC9010

Effective from: Serial No. Running Change

(EUROPE) **REF:WM-13150** **Issue Number 2**

The following changes have been made in the production of the unit listed above.

Ref. No.	Before		After		Remark
	Part No.	Description	Part No.	Description	
MC37	141 0 3799 01201	Gear Motor Compl. [M2]	620 209 8500	Assy,Gear,Motor,1 [M2]	Change
MC34	4 5279 71250	Main Motor [M1]	620 207 2432	Motor,9V,1W [M1]	Change
PCB1	4 1329 78680	Amplifier P.C.B. Assy	620 207 5440	Assy,PCB,Amp Main	Change
IC101	206 5 2491 60110	IC LB1601	– – – –	– – – –	Delete
VR3	4 2229 73961	Slide Volume 50KB	620 207 2760	VR,SLIDE,1X1K	Change
P101	4 2229 72970	Potentiometer 50K	620 005 6229	Potentiometer 500B	Change
R101	RD8 2 3251 JM000	CARBON 82K JA 1/4	401 158 3804	MT-FILM 120 JV 1/4	Change
R111	– – – –	– – – –	401 047 7500	MT-FILM 390 JP 1/4	Addition



Reason of change: Improvement of Performance

SANYO Electric Co., Ltd.
OSAKA, JAPAN

August/'90/500/H **Printed in Japan**

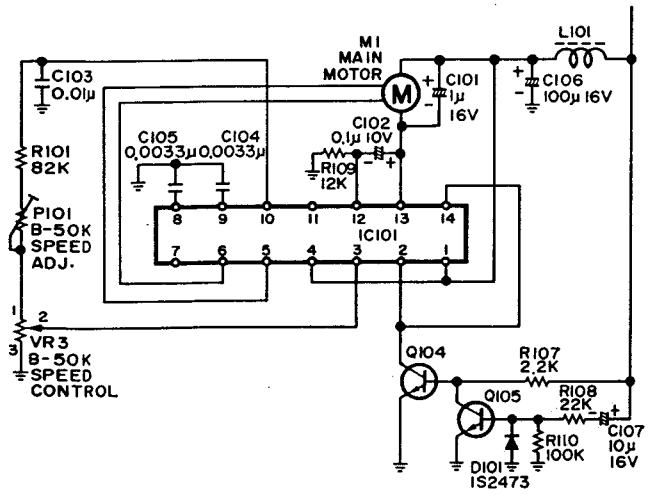
REFERENCE No. WM-7125N

CHANGE PARTS LIST (Continued)

Ref. No.	Before		After		Remark
	Part No.	Description	Part No.	Description	
C101	CD1 0 5160 0001V	ELECT 1U M 16V	– – – –	– – – –	Delete
C102	CA1 0 4100 M000V	OS-SOLID 0.1U M 10V	– – – –	– – – –	Delete
C103	4 2239 70702	Capacitor 0.01MF	– – – –	– – – –	Delete
C104	CI3 3 2250 KE00C	CERAMIC 3300P K 25V	– – – –	– – – –	Delete
C105	CI3 3 2250 KE00C	CERAMIC 3300P K 25V	– – – –	– – – –	Delete
C106	CD1 0 7160 0001V	ELECT 100U M 16V	– – – –	– – – –	Delete
R109	RD1 2 3251 JM000	CARBON 12K JA 1/4	– – – –	– – – –	Delete
L101	4 2539 70301	Inductor 100 UH K	– – – –	– – – –	Delete
W27	– – – –	– – – –	620 168 3806	TW UL1007AWG26RE	Addition
W28	– – – –	– – – –	620 168 5893	TW UL1007AWG26OR	Addition
W29	– – – –	– – – –	620 168 7514	TW UL1007AWG26YE	Addition
W30	– – – –	– – – –	620 167 8871	TW UL1007AWG26BK	Addition
W31	– – – –	– – – –	620 168 9648	TW UL1007AWG26BL	Addition

MOTOR GOVERNOR CIRCUIT DIAGRAM

BEFORE



AFTER